

# Polycrystalline Solar Module

**Series** P-100.18-A1020



## INTRODUCTION

SOKOYO photovoltaic(PV) modules are assembled by high-performance A-class cells and encapsulated by a durable back sheet, are capable of converting energy from incident lights on the front and diffuse light, as well as reflected and scattered light on rear sides, which make them better reliable, superior low irradiance performance, and excellent energy generation performance.



### High-Quality Guarantee

EL TEST twice 100% for semi-finished and finished products to eliminate defectives.



### Afford Any Bad Weather

Certificated 2400-Pascal wind and snow load.



### Efficiency Under Dim

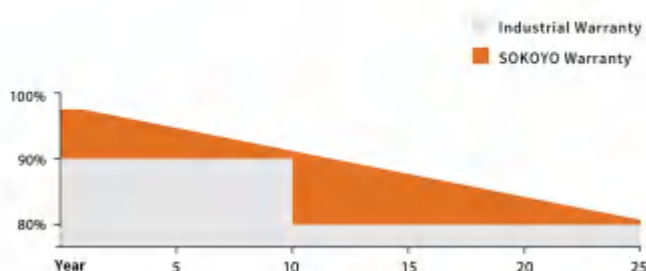
Using advanced glass and textures. Superior low irradiance performance.



### Higher Efficiency

High efficiency of conversion by using the new manufacturing technique and A-class cell.

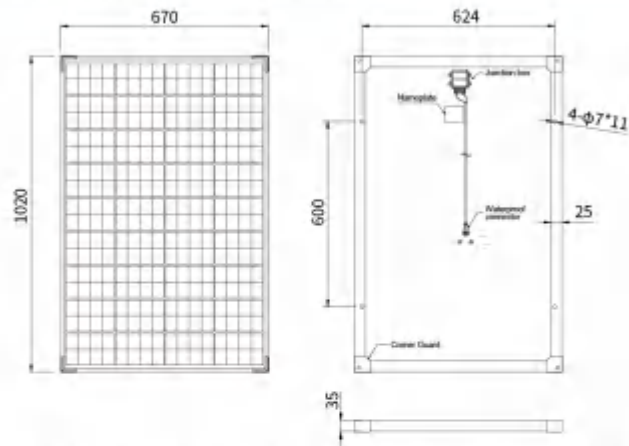
## Linear Graph of Performance Warranty



## Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems
- RoHS-2011/65/EU



**MECHANICAL DIAGRAMS**

**SPECIFICATIONS**

Cell	A Class Poly
Frame (material)	anodized aluminum alloy
Low-iron tempered glass	3.2mm
Mount Hole	4-φ7*11
No. of cells	36
Junction Box	IP65
Cable Connector	M18
Cable Length	according to system design
Packaging Configuration	2pcs Per Carton

Remark: customized cable length available upon request . Installation Holes Distance(D) depends on final order confirmation.

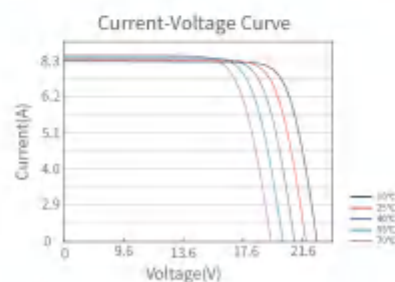
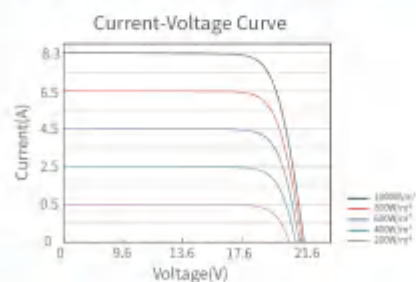
**ELECTRICAL PARAMETERS AT STC**

TYPE	P-100.18-A1020
Rated Maximum Power(Pmax) [W]	100
Maximum Power Voltage(Vmp) [V]	18
Open Circuit Voltage(Voc) [V]	21.6
Short Circuit Current(Isc) [A]	6.00
Maximum Power Current(Imp) [A]	5.56
Module Efficiency [%]	17
Power Tolerance	±3W
Temperature Coefficient of Isc(α <sub>Isc</sub> )	+0.060%/°C
Temperature Coefficient of Voc(β <sub>Voc</sub> )	-0.300%/°C
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )	-0.370%/°C
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G
Dimensions (mm)	670*1020*35(mm)
Weight (KG)	7.60kg

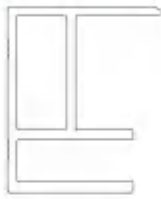
**ELECTRICAL CHARACTERISTICS AT NOCT**

Rated Max Power(Pmax) [W]	75.00	Maximum System Voltage	700V DC(IEC)	
Open Circuit Voltage(Voc) [V]	20.30	Operating Temperature	-40°C~+85°C	
Max Power Voltage(Vmp) [V]	16.92	Maximum Series Fuse	15A	
Short Circuit Current(Isc) [A]	4.78	Maximum Static Load,Front	2400Pa	
Max Power Current(Imp) [A]	4.43	Maximum Static Load,Back	2400Pa	
NOCT	Irradiance 800W/m <sup>2</sup> , 20°C ambient temperature, 1m/s wind speed.		NOCT	45±2°C

Remark: the above data do not refer to a single module and they are not part of the offer, only serve for comparison among different module types.

**CHARACTERISTICS**


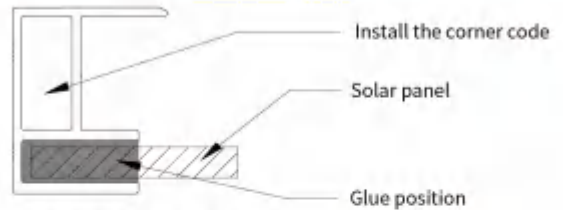
**STRUCTURE DISPLAY**



Profile Section



Docking corner code



Profile installation section

**PRODUCT DETAIL**



**Aluminum Alloy Frame**

Anodized aluminum frame for high corrosion resistance  
Up to 25 years of service life  
Improved load resistance capabilities for heavy wind loads



**Protect Corner**

Protect the solar panel frame during transportation  
Do not deform under the action of external force  
Protect the safety of the installer during the installation process



**High Transmission Low Iron Tempered Glass**

3.2mm thickness  
>91% higher light transmittance  
Work normally under 5400Pa snow load  
High mechanical strength



**EVA**

>91% higher light transmittance  
Higher gel content to provide good encapsulation  
And protect cells from vibration with longer durability

**Panel Label**

SOKOYO® PHOTOVOLTAIC MODULE	
<b>ELECTRICAL PARAMETERS</b> at STC (1000W/m² Am=1.5, T=25°C)	
Maximum Power (P <sub>max</sub> )	180 W
Tolerance of P <sub>max</sub>	±5 %
Voltage at P <sub>max</sub> (V <sub>mp</sub> )	18 V
Current at P <sub>max</sub> (I <sub>mp</sub> )	5.56 A
Open Circuit Voltage (V <sub>oc</sub> )	21.6 V
Short Circuit Current (I <sub>sc</sub> )	6.80 A
Maximum Series Fuse	15 A
Maximum System Voltage	750 V <sub>DC</sub>
<b>PHYSICAL PARAMETERS</b>	
Solar Cell Material	poly-crystalline
Cell Arrangement	4*9 in series
Module Net Weight	7.80 kg
Module Dimension	620*1820*35mm

CE

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**External View of Junction Box**



**High-performance Fluorine and Strong TPT Film Standard**



**Inside View of Junction Box**

